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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/855,360	05/15/2001	Ludwig Guenther	DE920000038US1	8762

26502 7590 08/30/2004

IBM CORPORATION
IPLAW IQ0A/40-3
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EXAMINER

LIN, KENNY S

ART UNIT PAPER NUMBER

2154

DATE MAILED: 08/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/855,360	Applicant(s) GUENTHER ET AL.	
	Examiner Kenny Lin	Art Unit 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) ✓ | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-9 are presented for examination.
2. The information disclosure statement (IDS) submitted on 1/9, 2002 and 5/15/2003 have been considered by the examiner.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pepe et al (hereinafter Pepe), US 5,673,322, in view of Gauvin et al (hereinafter Gauvin), US 5,790,800.

5. Pepe was cited by the applicant in the IDS.

6. As per claim 1, Pepe taught the invention substantially as claimed including a data communication method that compensates for disadvantageous characteristics of a first protocol that is used to communicate data between a client application and a server application, wherein the client application and the server application employ a second

Art Unit: 2154

protocol that is mapped onto the first protocol (col.5, lines 48-61), said method comprising the acts of:

- a. Intercepting, by a local proxy acting on behalf of a server application, a second-protocol data communication request from a client application (col.5, lines 48-57, col.7, lines 17-23, 32-34, 66-67, col.8, lines 1-5, 16-25);
- b. Mapping, by the local proxy, the second-protocol data communication request onto the first protocol (col.5, lines 48-59, col.7, lines 17-31, 51-60, 66-67, col.8, lines 1-5, 16-25);
- c. Sending the communication request to a remote proxy using the first protocol (col.5, lines 48-59, col.7, lines 17-34, 66-67, col.8, lines 1-8, 16-25);
- d. Compensating a disadvantageous characteristic of the first protocol (col.9, lines 2-67, col.10, lines 1-6);
- e. Mapping, by the remote proxy, the communication request back onto the second protocol to recreate substantially the second-protocol data communication request (col.5, lines 48-61, col.7, lines 34-38, col.8, lines 6-15, 26-33); and
- f. Delivering the second-protocol data communication request to the server application (col.5, lines 48-61, col.7, lines 34-38, col.8, lines 6-15, 26-33).

7. Pepe further taught that proxies can be of hardware, software or implemented on a firewall (col.7, lines 1-23). Pepe did not specifically teach that the local proxy is a client

Art Unit: 2154

interceptor, the remote proxy is the server interceptor and to compensate a disadvantageous characteristic of the first protocol. Gauvin taught to use interceptors in intercepting the requests (col.2, lines 38-42, col.9, lines 5-7, col.12, lines 57-63). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Pepe and Gauvin because Gauvin's teaching of using interceptors help to implement the proxies of Pepe's method to intercept requests and establish communications (Gauvin, col.12, lines 57-63).

8. As per claim 5, Pepe and Gauvin taught the invention substantially as claimed in claim 1. Pepe further taught wherein the second protocol is connection oriented (TCP, col.7, lines 16-24, 32-38), and wherein the client interceptor and the server interceptor intercept a plurality of connections between the client application and the client interceptor using the second protocol (col.7, lines 32-38, 66-67, col.8, lines 1-5, 16-25), and between the server interceptor and the server application using the second protocol (col.7, lines 32-38, 66-67, col.8, lines 26-33).

9. As per claim 6, Pepe and Gauvin taught the invention substantially as claimed in claim 5. Pepe further taught wherein the plurality of connections using the second protocol are multiplexed onto a single connection of the first protocol (col.8, lines 34-43).

10. As per claim 7, Pepe and Gauvin taught the invention substantially as claimed in claim 1. Pepe further taught wherein the first protocol is a wireless communication protocol (col.6, lines 65-67, col.7, lines 32-38, col.8, lines 1-5).

Art Unit: 2154

11. As per claim 8, Pepe and Gauvin taught the invention substantially as claimed in claim 1. Pepe further taught to comprise the act of opening, by the client interceptor, a connection to the server interceptor using the first protocol following the act of intercepting a second-protocol data communication request (col.8, lines 16-33).

12. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pepe and Gauvin as applied to claim 1 above, and further in view of Wils et al (hereinafter Wils), US 6,570,881.

13. As per claim 2, Pepe and Gauvin taught the invention substantially as claimed in claim 1. Pepe and Gauvin did not specifically teach wherein the act of compensating further comprises the acts of determining loss of a connection and reestablishing the connection responsive to the act of determining loss. Wils taught a network status determining method that detects loss of connection and reestablish of the connection responsive to the act of determining loss (col.6, lines 36-46, col.7, lines 56-67, col.8, lines 1-4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Pepe, Gauvin and Wils because Wils' teaching of determining connection loss enables Pepe and Gauvin's method to monitor more specifically and compensate more detail on the protocol, both advantageous or disadvantageous.

Art Unit: 2154

14. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pepe and Gauvin as applied to claim 1 above, and further in view of Backstrom et al (hereinafter Backstorm), US 5,903,851.

15. As per claim 3, Pepe and Gauvin taught the invention substantially as claimed in claim 1. Gauvin further taught to establish communication when request is intercepted (col.2, lines 38-42, col.12, lines 57-63). Pepe and Gauvin did not specifically teach wherein the act of compensating further comprises the acts of detecting that a connection is idle, dropping the connection, and reestablishing the connection. Backstorm taught to detect idle condition, drop connection and to reestablish connection (abstract, col.3, lines 65-67, col.4, line 1, lines 32-39). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Pepe, Gauvin and Backstorm because Backstorm's teaching of determining idle period enables Pepe and Gauvin's method to monitor more specifically and compensate more detail on the protocol, both advantageous or disadvantageous.

16. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pepe and Gauvin as applied to claim 1 above, and further in view of van Landegem et al (hereinafter van Landegem), US 5,265,091.

17. As per claim 4, Pepe and Gauvin taught the invention substantially as claimed in claim 1. Pepe further taught wherein the act of compensating further comprises the acts of determining that transmission capacity is insufficient process the data communication

Art Unit: 2154

request (col.9, lines 26-32). Pepe and Gauvin did not specifically teach wherein the act of compensating further comprises the acts of determining the transmission capacity to process the data communication request within a predetermined interval of time, and establishing a parallel connection to increase transmission capacity. van Landegem taught to determine the transmission capacity with a predetermined interval of time and to establish a parallel connection to increase transmission capacity (col.12, lines 15-40, 52-63, col.14, lines 54-61). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Pepe, Gauvin and van Landegem because van Landegem's teaching of determining transmission capacity and establishing parallel connection helps Pepe and Gauvin's method to determine bandwidth availability in a periodic basis in a connectionless environment (e.g., first protocol, col.2, lines 14-19)

18. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pepe and Gauvin as applied to claim 8 above, and further in view of O'Connell et al (hereinafter O'Connell), US 6,661,787.

19. As per claim 9, Pepe and Gauvin taught the invention substantially as claimed in claim 8. Gauvin further taught to comprise the acts of: receiving, by the client interceptor, an identification of the server application (col.9, lines 61-67, col.10, lines 1-19). Pepe and Gauvin did not specifically teach to forward the identification to an address-resolution server for first-protocol address resolution. O'Connell taught to use server identification to look up the network route and destination address using address

Art Unit: 2154

resolution protocol (col.1, lines 55-67, col.2, lines 1-6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Pepe, Gauvin and O'Connell because O'Connell's teaching of address resolution using identification to look up network address enables Pepe and Gauvin's method to identify the end station and the connection to the end station (col.1, lines 55-62).

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hassell et al, US 6,356,622.

21. A shortened statutory period for reply to this Office action is set to expire **THREE MONTHS** from the mailing date of this action.

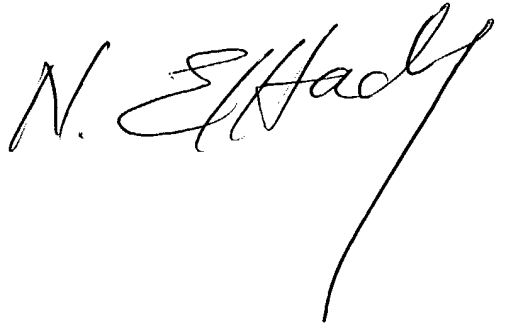
22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenny Lin whose telephone number is (703) 305-0438. The examiner can normally be reached on 8 AM to 5 PM Tue.-Fri. and every other Monday..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (703) 305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2154

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ksl
August 20, 2004

A handwritten signature in black ink, appearing to read "N. ElHadj", with a long, sweeping diagonal stroke extending downwards and to the right.